

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,	)	
Procedures and Rules for California Solar	)	Rulemaking 06-03-004
Initiative, the Self-Generation Incentive Program	)	
and Other Distributed Generation Issues	)	
	)	

#### **COMMENTS OF FUEL CELL ENERGY** REGARDING PROPOSED DECISION DENYING PETITION TO MODIFY DECISION 04-12-045

ELLISON, SCHNEIDER & HARRIS, LLP Lynn Haug Greggory Wheatland 2015 H Street Sacramento, California 95811-3109 Telephone: (916) 447-2166

Facsimile: (916) 447-3512

Attorneys for FuelCell Energy, Inc.

Dated: February 4, 2008

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# COMMENTS OF FUEL CELL ENERGY REGARDING PROPOSED DECISION DENYING PETITION TO MODIFY DECISION 04-12-045

In accordance with Rule 14.3 of the California Public Utilities Commission's ("Commission's") Rules of Practice and Procedure, FuelCell Energy ("FCE") respectfully submits these comments on the Proposed Decision of Commissioner Peevey Denying Petition by FuelCell Energy to Modify Decision 04-12-045 ("Proposed Decision" or "PD"). The Petition to Modify ("Petition") requests that the Commission modify Decision 04-12-045 to increase the limit on incentive payments available under the Self Generation Incentive Program ("SGIP") from the current cap of 1 MW to 3 MW.

As further discussed herein, FCE opposes the Proposed Decision's rejection of FCE's Petition to Modify. The Petition explains and documents the need for an increase in incentives for projects over 1 MW, as well as the public policy and environmental benefits of promoting larger DG applications. The Petition also discusses budgetary constraints and suggests that the Commission establish appropriate regulatory measures to ensure that incentive monies are wisely and fairly allocated between large and small DG projects. For these reasons, the Commission can and should grant FCE's Petition to Modify.

Alternatively, the Commission should allow FCE to submit additional factual documentation (as summarized in the attached Offer of Proof) in support of its Petition and, if deemed necessary, the Commission should schedule an evidentiary hearing to ensure that the

record is complete. FCE will file later this week an Amended Petition for Modification in Docket No. 04-04-026 providing additional factual support for its request.

#### I. THE PD ERRS IN REJECTING FCE'S PETITION FOR MODIFICATION.

A. The FCE Petition explained and documented the need for SGIP incentives for larger (1-3 MW) fuel cell projects.

The Proposed Decision recommends rejection of FCE's Petition on the basis that the Petition did not include certain financial information and analysis, including project viability analysis and documentation of the cost of a typical project in relation to the current and proposed incentive caps.<sup>1</sup> However, there is adequate information in the Petition and in supportive comments of other parties (including the SGIP Program Administrators) to support adoption of FCE's request.<sup>2</sup>

In accordance with Rule 16.4, FuelCell Energy supported its Petition with a sworn declaration documenting that potential customers with loads larger than 1 MW have a strong interest in fuel cell technologies, but have been discouraged from installing such technologies because of the lack of incentives above 1 MW.<sup>3</sup> FCE also discussed in the Petition and in its supporting declaration the fact that water treatment plants in particular require larger scale projects and that based on the statements of operators those projects are not installing fuel cells because of the lack of incentives covering larger projects.<sup>4</sup> FCE testified that gas from water treatment plants is otherwise flared, and that an increase in the incentive cap to 3 MW could

<sup>&</sup>lt;sup>1</sup> PD at 8

<sup>&</sup>lt;sup>2</sup> As noted in the PD, all three SGIP program administrators (Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE") and California Center for Sustainable Energy ("CCSE")) filed comments supporting FCE's Petition, subject to certain conditions. The Petition was also supported by the Center for Energy Efficiency and Renewable Technologies (CEERT), the National Fuel Cell Research Center, Alliance Power, Inc., ApolloPower Inc., California State University Northridge, Carollo Engineers P.C., Chevron Energy Solutions Company, Gills Onions Rio Farms, HydroGen Corporation, Manuael Bros., Inc., Marubeni Corporation, MISCO, Powerhouse Energy LLC, Silverwood Energy, Inc., and Starwood Hotels and Resorts Worldwide Inc.

<sup>3</sup> FCE Petition, Attached Declaration of William Karambelas ("Declaration") ¶¶ 3-5.

<sup>&</sup>lt;sup>4</sup> FCE Petition at 4-8; Declaration at ¶ 5-7.

result in significant conversions of municipal wastes from a costly pollution source to a highly efficient ultra-clean energy source.<sup>5</sup> FCE also testified that there was similar potential for creating a market for larger fuel cells in other applications.<sup>6</sup>

The Commission's prior decisions discussing the 1 MW cap have focused on the Commission's overall program policy and objectives rather than individual project cost and viability analysis. For this reason, FCE's Petition focused on the market demand for larger-scaled fuel cells and the impact on customers of the 1 MW cap rather than project cost data. FCE is also cognizant that the Commission has stated in various previous decisions, including the very recent order establishing the 2008 budget for the SGIP, that it does not intend to make findings on the cost-effectiveness of individual DG technologies in advance of the cost-benefit study mandated by Public Utilities Code section 379.6.8

FCE supported its Petition with information regarding the market for larger fuel cells, the economies of scale associated with larger projects, and the particular case of municipal water treatment plants. In addition, as PG&E and CCSE note in their supportive comments, public records document the very minimal participation of projects sized over 1 MW (particularly renewable projects) in the SGIP.<sup>9</sup> For these reasons, the Commission should grant the Petition's request for an appropriately conditioned increase in the SGIP incentive cap.

## B. If the Commission believes additional information is needed, it should permit FCE to supplement the record.

As noted above, FCE reasonably did not anticipate that the Commission would want project cost data in support of the Petition, and therefore supporting documentation was focused

<sup>&</sup>lt;sup>5</sup> Declaration at ¶ 7.

<sup>&</sup>lt;sup>6</sup> Declaration at ¶ 9.

<sup>&</sup>lt;sup>7</sup> See e.g. D.04-12-045 at 9; D.02-02-026 at 10-11.

<sup>&</sup>lt;sup>8</sup> See e.g. D.04-12-045 at 9; D. 08-01-029 at 5.

<sup>&</sup>lt;sup>9</sup> PG&E Comments at 2-3; CCSE Comments at 6.

on market information and policy justifications for raising the SGIP incentive cap to 3 MW. The PD suggests that the Commission is interested in obtaining more specific data regarding project cost, economies of scale, and related factual questions. This information is readily available. In order to ensure that the Commission's questions are answered and that the Commission's decision is based on a complete record, FCE is submitting this week an Amended Petition for Modification containing additional sworn declarations and analysis, including consideration of some of the alternatives suggested in the comments of the Program Administrators and others supporting FCE's Petition. This additional data and analysis is briefly summarized in FCE's Offer of Proof, which is attached hereto as Appendix C.

As discussed further in Section II below, if the Commission determines that additional factual information is needed, the Commission should postpone a final decision in order to allow consideration of the Amended Petition. If there are any remaining factual issues, or if the Commission otherwise deems it necessary, the Commission should hold a hearing.<sup>10</sup> This hearing may address the factual issues raised by the PD and/or the impact of alternative incentive structures suggested by FCE and intervening parties.

## C. The PD's concern regarding SGIP budget limitations should be addressed by adopting appropriate regulatory controls.

The PD cites, as grounds for summarily denying FCE's Petition, a concern that the entire SGIP budget could be depleted on just a few large fuel cell projects. <sup>11</sup> FCE specifically acknowledged and discussed this issue in the Petition and in its Reply to the comments of other

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<sup>&</sup>lt;sup>10</sup> Section 1708 of the California Public Utilities Code provides that the Commission "may at any time, upon notice to the parties, and with opportunity to be heard as provided in the case of complaints, rescind, alter, or amend any order or decision made by it."

<sup>&</sup>lt;sup>11</sup> PD at 8-9.

parties.<sup>12</sup> Supporting parties also discussed budgetary constraints and made specific suggestions for addressing those constraints.<sup>13</sup>

The fundamental goal of maximizing the benefit from limited SGIP incentive funds will best be served by using those funds to encourage *both* large and small scale fuel cell projects, while establishing appropriate regulatory limits as needed. These issues are discussed in subsection 3 below.

1. The SGIP program had a carryover of funds from 2007 and will fund only wind and fuel cell projects as of January 1, 2008.

While acknowledging that SGIP funds are by no means unlimited, it is important to note that the SGIP budget seems healthy and not likely to be oversubscribed if the Commission establishes reasonable limitations on the allocation of funds.

As recently acknowledged in the Commission's decision adopting the 2008 SGIP budget, the program's 2007 budget was not fully used and has been carried over into 2008.<sup>14</sup> In addition, as of January 1, 2008, the SGIP program has been narrowed to fund only wind and fuel cell projects and will no longer include gas turbines and combustion engines. This means that more funds should be available in 2008 to fuel cell and wind projects.

2. The PD's speculation that funding more small projects and fewer large projects could benefit competition overall reflects a misunderstanding of the market.

The PD includes two statements that suggest a misunderstanding of the fundamental difference between large and small fuel cell applications, and the need to separately consider both applications in allocating SGIP incentive funds. First, the PD says: "Our denial of FCE's

<sup>&</sup>lt;sup>12</sup> FCE Petition at 9; FCE Reply at 4-6.

<sup>&</sup>lt;sup>13</sup> See SCE Comments at 3 (incentives above 1 MW for renewable fuel cells only); PG&E Comments at 3-4 (incentives above 1 MW for renewable projects only, tiered incentive structure, 2 year pilot period); CCSE Comments at 4-6 (increase SGIP budget, tiered incentives above 1 MW); CEERT Response at 2 (funding guarantee for projects under 1 MW, hold back incentives over 1 MW pending end of year determination).

<sup>&</sup>lt;sup>14</sup> See D.08-01-028. From information currently available on the SGIP Program Administrators' websites, it appears that approximately \$96 million will carry over from previous years to the 2008 SGIP budget.

petition does not mean that large fuel cell installations cannot be developed."<sup>15</sup> This, according to the PD, is because the SGIP program is available to projects up to 5 MW in size.

Unfortunately, the PD doesn't address the real question, which is whether large fuel cell installations can be developed without any incentives over 1 MW.

In fact, as supporting commenters point out, SGIP program participants for the most part aren't installing larger fuel cells. <sup>16</sup> FCE discussed this problem in some detail in the Petition.

Essentially it is a question of scale. Larger applications require larger sized generation facilities.

Installing a 1 MW fuel cell at a facility that has a 2 MW load may not be operationally feasible in a combined heat and power application, and may not be economically feasible, even if the engineering obstacles were overcome. Simply saying that the SGIP program *could* theoretically support projects up to 5 MW doesn't mean that those projects *will* be built in the absence of incentives. In fact, the evidence from SGIP so far clearly suggests the opposite.

The second statement in the PD that suggests a misunderstanding of the Petition and fuel cell technology is the assertion that granting the Petition "could actually limit competition in the fuel cell industry by allowing one provider to lock-up virtually the entire incentive budget." Leaving aside the budget depletion issue, which can be addressed by appropriate regulatory limits, the PD is simply incorrect in presuming that large and small fuel cells are in direct competition with each other.

FCE discussed in the Petition the significant differences between the markets for small and large fuel cells. For the most part, the customer loads are not the same, the applications are not the same, and to some extent, the technologies are not the same. It may be in the self-interest of a manufacturer of smaller fuel cells to argue that competition benefits by allocating SGIP

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<sup>&</sup>lt;sup>15</sup> PD at 10.

<sup>&</sup>lt;sup>16</sup> CCSE Comments at 6; PG&E Comments at 2-3.

<sup>&</sup>lt;sup>17</sup> PD at 8.

funds only to small fuel cell customers. However, the reality of customer applications and the markets is more complicated.

If the Commission is defining its renewable technology development goals strictly in terms of numbers, then it will allocate all of its funding to the smallest sized customer applications and none to larger applications. If, on the other hand, the Commission's goal is to help encourage development and commercialization of *both* small and large DG technologies, then the Commission needs to explore how best to do this rather than assuming the two are in competition with each other. The Commission has recognized the importance of providing incentives to both large and small solar photovoltaic projects by allocating funds to both small residential/commercial and large commercial/industrial projects. It should do the same for fuel cells and other promising DG technologies.

3. To ensure that the SGIP budget is appropriately allocated between large and small projects, the Commission should adopt appropriate limitations and revisit such limitations as necessary.

FCE and other parties to this proceeding have discussed in some detail proposals for ensuring that increasing the incentive cap will not deplete the entire SGIP budget on a few large projects or otherwise compromise programmatic goals. The PD unfortunately dismisses such proposals without any meaningful consideration.<sup>18</sup>

Given the clear interest of Program Administrators in raising the incentive cap (with proper limitations), and considering the environmental and other documented benefits of expanding the large DG market, <sup>19</sup> the Commission should carefully consider the approaches that seem most fair and workable. FCE agrees with SCE that the proposed incentive increase should be limited to renewable DG projects while leaving non-renewable incentives unaltered (at least

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<sup>&</sup>lt;sup>18</sup> PD at 9.

<sup>&</sup>lt;sup>19</sup> See FCE Petition at 7-8.

for now). FCE also believes that the positions taken by both PG&E and CCSE regarding a tiered incentive structure merit further consideration.

As discussed above, the Commission should take additional evidence in order to obtain a thorough understanding of these and possibly other options for limiting the incentives available to larger projects, and schedule a hearing if needed. As noted above, it appears that the most promising approaches to preserving the SGIP budget while providing adequate incentives for large DG are:

- limiting eligibility for incentives above 1 MW to renewable fuel cell or wind power projects.
- implementing a tiered incentive for renewable projects that would retain the current level of \$4500/kW up to the first 1 MW, decreasing to \$2500/kW between 1-2 MW, and further decreasing to \$1500 per kW above 2 MW up to 3 MW.
- approving the increase in the incentive cap as a 2 year "pilot" program adjustment, with extension beyond the end of 2009 provided only subject to Commission order following evaluation of the impact of this program adjustment.

FCE believes the above measures would set appropriate boundaries on the proposed change. FCE will discuss and provides cost analysis relevant to these options in its Amended Petition for Modification. There are, of course other possibilities. For example, the Commission could consider earmarking an appropriate (as determined in proceedings) percentage of annual SGIP budget to projects smaller than 1 MW, with the proviso that if those funds have not been reserved by the end of the third quarter, they will become available to larger projects.<sup>20</sup> The Commission could also cap incentives for renewable projects above 1 MW at a percentage of

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<sup>&</sup>lt;sup>20</sup> To simplify administration of this condition, it would probably make sense to clarify that any additional funds made available from project dropout or carryover from the previous year's budget will not be subject to earmark, i.e. will be available to projects of any size.

project costs, with the appropriate percentage determined on the basis of recommendations of Program Administrators and interested parties.

#### 4. AB 1613 is not a replacement for SGIP funding.

The PD notes that AB 1613, recently passed by the California Legislature, "may help support large fuel cell projects." FCE agrees that AB 1613 may help some fuel cell customers – but only when the program is implemented, and if the customer is able to afford to obtain upfront financing for the fuel cell, and if the fuel cell produces electricity in excess of on-site load. FCE is pleased that the Legislature passed AB 1613 to assist this category of customers and intends to participate in implementation proceedings. However, to be clear, AB 1613 is not yet available to fuel cell customers. AB 1613 offers nothing for customers that design their systems to match on-site load. And AB 1613 does not help customers that need the assurance of up-front incentives in order to finance their system.

- II. IF COMMISSION CONCLUDES THAT THE RECORD IS INSUFFICIENT TO APPROVE THE PETITION FOR MODIFICATION, THE COMMISSION SHOULD POSTPONE ACTION ON THE PD AND CONSIDER THE SUPPLEMENTARY INFORMATION PROVIDED IN FCE'S AMENDED PETITION FOR MODIFICATION.
  - A. FCE attaches, as an Offer of Proof, a description of the additional information that will be provided in FCE's Amended Petition for Modification.

The PD identifies a number of factual issues associated with the Petition. As discussed above, it was not clear from prior decisions or otherwise that the Commission required the particular information identified in the PD in order to act on FCE's Petition. FCE respectfully seeks an opportunity for itself and for other interested parties to supplement the record. Specifically, in order to ensure that all issues are properly addressed and that the Commission makes its decision based on a complete record, FCE attaches hereto as Appendix C an Offer of

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<sup>&</sup>lt;sup>21</sup> PD at 10

Proof summarizing the additional factual documentation and analysis FCE provides in support of its Petition. FCE's Amended Petition, which will be filed at the Commission this week, will provide all of the factual documentation and analysis summarized in the Offer of Proof.

# B. The Commission should establish procedures to ensure that a final decision in this proceeding is based on a complete record and that due process rights are preserved for all parties.

Typically, where the Commission finds that a petition for modification raises important substantive and policy issues but does not include adequate supporting data, it has been the practice of the Commission to allow a party to amend the petition to provide the necessary substantiation. For example, in Rulemaking 04-04-026, the Commission initially found that petitioners seeking modification of Decision 04-06-014 had failed to provide a supporting declaration or affidavit or otherwise support certain factual allegations.<sup>22</sup> The petitioners submitted an amended petition, parties commented on that amended petition, and the Commission ultimately issued a decision on the amended petition.<sup>23</sup> FCE requests that the Commission similarly allow for supplementation of the record in this case. If the Commission determines that there are disputed issues of fact or that a hearing is otherwise necessary, the Commission should schedule an evidentiary hearing pursuant to its authority under Section 1708 of the Public Utilities Code.

# III. THE COMMISSION'S DECISION HAS IMPORTANT IMPLICATIONS FOR THE STATE'S GOALS OF REDUCING GHG EMISSIONS AND INCREASING RESOURCE DIVERSITY

In order to meet the State of California's ambitious goals for reducing greenhouse gas ("GHG") emissions and increasing the percentage of statewide electrical load served by renewable energy sources, the Commission needs to encourage development of larger DG

<sup>&</sup>lt;sup>22</sup> R.04-04-026, Proposed Decision (May 22, 2007) at 18-21.

<sup>&</sup>lt;sup>23</sup> D 07-11-025 at 3

technologies. In order to do that, the Commission needs to look carefully and strategically at how SGIP funding is being distributed, and make changes when necessary to ensure that all promising GHG reducing technologies and applications have an opportunity to become commercially viable and to contribute to California's energy future.

While larger DG projects cost more and require a greater initial investment by both the customer and by the Commission, they offer commensurate (or sometimes greater) value in MWh's produced, in GHG emissions avoided, and in all of the other benefits associated with distributed generation. Those benefits are not insignificant. Recognizing this, the California Energy Action Plan has prioritized renewable power and DG in the loading order.<sup>24</sup> The California Energy Commission has, in the 2007 Integrated Energy Policy Report, observed that:

> Distributed generation and combined heat and power, regardless of size or interconnection voltage, are valuable resource options for California. Combined heat and power, in particular, offers low levels of greenhouse gas emissions for electricity generation, taking advantage of fuel that is already being used for other purposes. Distributed generation can also play an important role in helping to meet local capacity requirements. The California Independent System Operator (California ISO) has encouraged the CPUC to include local capacity requirements in its procurement process to replace power plants that must operate, even if uneconomically, to preserve system reliability.<sup>25</sup>

And recognizing the State's overarching mandate to reduce greenhouse gases, the Commission evaluates the SGIP program annually to determine its contribution toward reducing GHG emissions. The most recent GHG reduction data, issued in 2007, surveys operational renewable SGIP projects during the 2006 performance year. 26 This GHG data offers compelling evidence supporting FCE's Petition. For example,

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<sup>&</sup>lt;sup>24</sup> State of California, Energy Action Plan II, Implementation Roadmap for Energy Policies, September 21, 2005 at p.1.
<sup>25</sup> California Energy Commission, 2007 Integrated Energy Report, December 2007, p. 9.

<sup>&</sup>lt;sup>26</sup> CPUC Self Generation Incentive Program Sixth Year Impact Evaluation, August 2007, pp. 1-19.

- Rated at 1.49 tons per MWh of GHG reduction, renewable fuel cells deliver more GHG mitigation benefits than wind and solar power systems (each rated at 0.60 tons per MWh) combined.<sup>27</sup>
- The current average SGIP fuel cell project delivers GHG reductions at a rate of \$581.50 per ton, compared to \$3,152.02 per ton for solar or \$20,750.10 per ton for wind systems.
   With the proposed increase in incentives to the 3 MW level, the cost of GHG reductions drops to a level of \$248.01 per ton.
- Renewable fuel cells deliver more of their rated output during the peak periods of the summer season when California faces a critical need for power. During these peak hours renewable fuel cells deliver more of their rated capacity than wind and solar systems combined.

Larger DG projects often serve customer applications that smaller DG can't serve, and so advance the objective of matching project size, technology and load in a manner than maximizes efficiencies. If the Commission decides to forego offering incentives to large DG projects in order to increase the number of small DG projects, the Commission will probably end up spreading funds among more individual customers. However, it will be favoring the development of one DG market over another and forfeiting the opportunity to bring more large DG projects into the California resource mix. Recognizing that it is the State's goal to advance all renewable energy technologies to the extent possible and as quickly as possible, the Commission should seriously consider a more inclusive policy.

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<sup>&</sup>lt;sup>27</sup> By comparing fuel cells to intermittent resources, FCE is not criticizing wind or solar or advocating any less support for these technologies, which offer important benefits to the state. But in considering the Petition, the Commission should take into consideration that fuel cells, by their design and high capacity factor, offer proportionately higher GHG reduction benefits per dollar of investment than intermittent technologies.

#### IV. CONCLUSION

For the reasons discussed above, FCE respectfully requests that the Commission adopt a final decision authorizing SGIP incentives up to 3 MW, with appropriate conditions.

Alternatively, Commission should refrain from acting on the PD at this time and instead accept FCE's Amended Petition for Modification and issue an order calling for comments or further proceedings as necessary to ensure a complete record.

Dated:	February 4,	2008
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	Res	pectfully	y su	bmit	ted,
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By:	/s/

Lynn Haug Greggory Wheatland Ellison, Schneider & Harris, LLP 2105 H Street Sacramento, CA 95811 Telephone: 916-447-2166

Fax: 916-447-3512 <a href="mailto:lmh@eslawfirm.com">lmh@eslawfirm.com</a>

## APPENDIX A SUBJECT INDEX OF RECOMMENDED CHANGES TO PD

As discussed in its Comments, FCE recommends that the Commission either: 1) approve the Petition For Modification; or 2) stay further action on the PD pending the Commission's consideration of FCE's Amended Petition for Modification. The following alternatives correspond to these two approaches.

#### First Alternative:

- Eliminate paragraphs 2-4 in Discussion section (pp. 8-9). Replace with text discussing need for increase in incentive cap from 1 to 3 MW in order to encourage development of larger DG facilities. Discuss particular characteristics of customers with need for larger fuel cell installations to match on-site load, including water treatment plants.
- Eliminate paragraph 5 in Discussion section (p.9). Replace with text discussing appropriate limits to ensure that the SGIP budget remains available to both large and small projects.
- Eliminate paragraph 6 in Discussion section (p.10). Replace with text noting that the SGIP program may complement other efforts to encourage development of larger DG projects, including AB 1613, which will require utilities to purchase excess electricity from eligible combined heat and power projects.
- Make corresponding changes to Findings of Fact, Conclusions of Law and Ordering Paragraphs.

#### Second Alternative:

Withdraw or stay action on the PD until the Commission has considered additional information provided in the Amended Petition.

## APPENDIX B PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

As discussed in its Comments, FCE recommends that the Commission either: 1) approve the Petition For Modification; or 2) stay further action on the PD pending the Commission's consideration of FCE's Amended Petition for Modification. The following alternatives correspond to these two approaches.

#### First Alternative:

Replace Finding of Fact 3 with:

3. The Commission has determined, based on information provided in the Petition and by commenting parties, that incentives up to 3 MW are necessary in order to encourage customers to install larger sized renewable projects.

Replace Conclusions of Law 1 and 2 with:

- 1. Increasing the SGIP 1 MW incentive limit would increase the number of larger DG projects.
- 2. The Commission will raise the 1 MW incentive limit to 3 MW, provided that:
  - incentives over 1 MW will only be available to renewable projects; and
  - the incentive up to 1 MW will remain at \$4500/kW, the incentive above 1 MW to 2 MW will be \$2500/kW, and the incentive above 2 MW will be \$1500/kW; and
  - the Commission will authorize incentives for projects over 1 MW on a 2 year pilot basis, review the impact of this program change at the end of the 2 year period and determine whether to extend this program change for future years.

#### Second Alternative:

Withdraw or stay action on the PD until the Commission has considered additional information provided in the Amended Petition.

#### APPENDIX C OFFER OF PROOF

FCE hereby offers to provide the following additional information and analysis in support of its Petition for Modification. The information summarized below will be included in an Amended Petition for Modification that will be submitted this week to the Commission. FCE will, to the extent possible, also provide any addition information requested by the Commission.

- 1. Declaration of FCE's Director of Business Development for the U.S. Western Region explaining and analyzing current fuel cell costs and output, economies of scale, GHG benefits from larger fuel cells. The declaration will include a spreadsheet containing the following information:
  - current cost of average (705 kW) fuel cell installed under SGIP program (per most recent published data)
  - current cost of installation for average SGIP fuel cell
  - current cost of renewable fuel treatment system for average SGIP fuel cell
  - current total system cost of FCE 1200 kW and 2400 kW fuel cells
  - current cost of installation for FCE 1200 kW and 2400 kW fuel cells
  - current cost of renewable fuel treatment system for FCE 1200 kW and 2400 kW fuel cells
  - forecast total system cost of FCE 1200 kW and 2400 kW for 3 years looking forward
  - comparison of external costs (mechanical and electric components, installation and fuel treatment) as percentage of total project cost for current average SGIP fuel cell project, FCE 1200 kW fuel cell and FCE 2400 kW fuel cell
  - summary of average output (MWh) of current average SGIP fuel cell, FCE 1200 kW fuel cell and 2400 kW fuel cell
  - summary of annual GHG reduction for average SGIP fuel cell, FCE 1200 kW fuel cell and 2400 kW fuel cell
  - GHG reduction costs (\$ per ton) for average SGIP fuel cell, FCE 1200 kW fuel cell and 2400 kW fuel cell
- 2. Declaration of Professor Scott Samuelson, Ph.D, Director of National Fuel Cell Research Center explaining and analyzing why incentives are currently needed in order to make larger fuel cell projects viable.

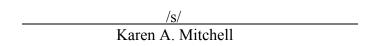
#### PROOF OF SERVICE

I declare that:

I am employed in the County of Sacramento, State of California. I am over the age of eighteen years and am not a party to the within action. My business address is ELLISON, SCHNEIDER & HARRIS; 2015 H Street; Sacramento, California 95811-3109; telephone (916) 447-2166.

On February 4, 2008, I served the attached *Comments of Fuel Cell Energy Regarding Proposed Decision Denying Petition to Modify Decision 04-12-045* by electronic mail or, if no email address was provided, by United States mail at Sacramento, California, addressed to each person shown on the attached service list.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed on February 4, 2008, at Sacramento, California.



#### SERVICE LIST R.06-03-004

abcstatelobbyist@sbcglobal.net

abonds@thelen.com adamb@greenlining.org

aes@cpuc.ca.gov akawnov@yahoo.com akbar.jazayeri@sce.com amber.dean@sce.com

 $and rew.mcall is ter@energy center.org\\ and y.vanhorn@vhcenergy.com$ 

anewman@solarcity.com annette.gilliam@sce.com arno@recurrentenergy.com

arr@cpuc.ca.gov as2@cpuc.ca.gov

atrowbridge@daycartermurphy.com

barbara@earthskysolar.com bautistafaith@yahoo.com bbaker@summitblue.com bcragg@goodinmacbride.com

ben@solarcity.com

bernadette@environmentcalifornia.org

bills@clearEdgepower.com bjeider@ci.burbank.ca.us

bkc7@pge.com

blaising@braunlegal.com bob.ramirez@itron.com bob@energydynamix.net bobakr@greenlining.org brad@bradburkearchitect.com

brd@cpuc.ca.gov bstewart@solarcraft.com

californiadockets@pacificorp.com

Case.Admin@sce.com cbressanitanko@rsgrp.com cchen@ucsusa.org

CEM@newsdata.com cfaber@semprautilities.com

ciee@ucop.edu CLHs@pge.com cln@cpuc.ca.gov

cmanson@semprautilities.com cmanzuk@semprautilities.com

cmkehrein@ems-ca.com cp@kacosolar.com

cpucrulings@navigantconsulting.com

cpucsolar@rahus.org

cswoollums@midamerican.com

cte@eslawfirm.com d.miller@suntechnics.com Dan.Thompson@SPGsolar.com
Dan@EnergySmartHomes.net
darmanino@co.marin.ca.us
david.felix@mmarenew.com
david.kopans@fatspaniel.com
David.Townley@townleytech.com

david@nemtzow.com dcarroll@downeybrand.com

deb@a-klaw.com demorse@omsoft.com dfield@openenergycorp.com dhardy@cabrilloedc.org diane\_fellman@fpl.com dietrichlaw2@earthlink.net

dil@cpuc.ca.gov

djamison@capstoneturbine.com

dks@cpuc.ca.gov dot@cpuc.ca.gov

douglass@energyattorney.com

dowen@ma.org

dprall@solarpowerinc.net

dsh@cpuc.ca.gov eah@cpuc.ca.gov

ebrussell@suntechamerica.com edward.randolph@asm.ca.gov

ek@a-klaw.com ekgrubaugh@iid.com elarsen@rcmdigesters.com Elizabeth.Ferris@spgsolar.com

elvine@lbl.gov

emackie@gridalternative.org

emello@sppc.com enriqueg@lif.org

eric.carlson@spgsolar.com eshafner@solel.com

felazzouzi@gridalternatives.org

filings@a-klaw.com fsmith@sfwater.org gary@sunlightandpower.com

gbeck@etfinancial.com George.Simons@itron.com

george@utilityconservationservices.com

ghinners@reliant.com GLBarbose@LBL.gov glw@eslawfirm.com gmorris@emf.net

gopal@recolteenergy.com

gpickering@navigantconsulting.com grant.kolling@cityofpaloalto.org gwiltsee@dricompanies.com

gyee@arb.ca.gov

h.dowling@suntechnics.com hchoy@isd.co.la.ca.us hfhunt@optonline.net hgreen@sunedison.com info@calseia.org

info@solarpathfinder.com

irene.stillings@energycenter.org

iris.chan@spgsolar.com j.marston@suntechnics.com

jack.burke@energycenter.org

james.lehrer@sce.com

janh@pacpower.biz

janice@strategenconsulting.com

janmcfar@sonic.net Javier.Burgos@sce.com

jci@cpuc.ca.gov jcluboff@lmi.net jeff@grosolar.com

jennifer.porter@energycenter.org

jesser@greenlining.org

jf2@cpuc.ca.gov

jhamrin@resource-solutions.org

jharris@volkerlaw.com jim@dshsolar.com jimross@r-c-s-inc.com jjensen@kirkwood.com jjw@cpuc.ca.gov jkarp@winston.com

jlanderos@proteusinc.org jluckhardt@downeybrand.com

jm3@cpuc.ca.gov jmaskrey@sopogy.com

jody london consulting@earthlink.net

joel.davidson@sbcglobal.net joelene.monestier@spgsolar.com john.schuster@utcpower.com john.supp@energycenter.org johnperlin@physics.ucsb.edu johnrredding@earthlink.net

ion.bonk-vasko@energycenter.org

Jose.atilio@gmail.com
josephhenri@hotmail.com
joshdavidson@dwt.com
jpigott@optisolar.com
jpross@sungevity.com
jrichman@bloomenergy.com
jsqueri@goodinmacbride.com
julie.blunden@sunpowercorp.com

juliettea7@aol.com

jwiedman@goodinmacbride.com

jwimblev@csd.ca.gov

jwmctarnaghan@duanemorris.com

jwwd@pge.com jxm@cpuc.ca.gov

jyamagata@semprautilities.com

karen@klindh.com
karin.corfee@kema.com
karly@solardevelop.com
kate@sunlightandpower.com
kdusel@navigantconsulting.com

ken.krich@ucop.edu kennyk@solel.com kfox@wsgr.com

kirk@NoElectricBill.com kjsimonsen@ems-ca.com kmccrea@sablaw.com kmills@cfbf.com knotsund@berkeley.edu ksheldon@sma-america.com ksmith@powerlight.com

ksoares@usc.edu

kstokes@solarpowerinc.net kyle.l.davis@pacificorp.com l\_brown246@hotmail.com

LATc@pge.com

lauren.purnell@pge-corp.com
legislative@recsolar.com
lex@consumercal.org
lfultz@sbcglobal.net
lglover@solidsolar.com
liddell@energyattorney.com
lmerry@norcalsolar.org
lmh@eslawfirm.com
LowryD@sharpsec.com

lp1@cpuc.ca.gov

lpark@navigantconsulting.com lschavrien@semprautilities.com lwrazen@sempraglobal.com MABolinger@lbl.gov manjusuri@yahoo.com marigruner@yahoo.com mark.mah@glunetworks.com markgsp@sbcglobal.net Marshall.Taylor@dlapiper.com matt.golden@sustainablespaces.com

matt.scullin@newresourcebank.com mday@goodinmacbride.com mdjoseph@adamsbroadwell.com

meb@cpuc.ca.gov

meganmmyers@yahoo.com mhyams@sfwater.org

Michael.Brown@utcpower.com michaelboyd@sbcglobal.net michaelkyes@sbcglobal.net michaely@sepcor.net michelle.breyer@gs.com mike.montoya@sce.com mjwms@calwes.com mkay@aqmd.gov

mluevano@globalgreen.org

mmazur@3phasesRenewables.com

mponceatty@aol.com mrawson@smud.org mrw@mrwassoc.com mscheibl@arb.ca.gov mshames@ucan.org mstout@unlimited-energy.com

mts@cpuc.ca.gov mvc@cpuc.ca.gov mwbeck@lbl.gov nao@cpuc.ca.gov

nehemiah.stone@kema.com nellie.tong@us.kema.com

nes@a-klaw.com nick@npcsolar.com njfolly@tid.org NJPadgett@lbl.gov nlc@cpuc.ca.gov notice@psrec.coop npedersen@hanmor.com nsuetake@turn.org obrienc@sharpsec.com ofoote@hkcf-law.com olivia.samad@sce.com patrick.lilly@itron.com paul.kubasek@sce.com paul@tiogaenergy.com pbrehm@infiniacorp.com

pepper@cleanpowermarkets.com

ph@phatmedia.com phillip mcleod@lecg.com placourciere@thelen.com pnarvand@energy.state.ca.us ppettingill@caiso.com

psd@cpuc.ca.gov

pthompson@summitblue.com pucservice@dralegal.org pw1@cpuc.ca.gov rachel@ceert.org

rb@greenrockcapital.com rbelur@enphaseenergy.com

rberke@csd.ca.gov

rdennis@knowledgeinenergy.com

rhwiser@lbl.gov rishii@aesc-inc.com rjl9@pge.com

rkmoore@gswater.com rmccann@umich.edu rob@consol.ws

rob@dcpower-systems.com

rob@teamryno.com

Robert.F.LeMoine@sce.com robert.pettinato@ladwp.com robertg@greenlining.org rod.larson@sbcglobal.net

rogerlaubacher@pvpowered.com

ron@relenergy.com

ronnie@energyrecommerce.com rschmidt@bartlewells.com ryan.flynn@pacificorp.com

S2B9@pge.com

saeed.farrokhpay@ferc.gov

sara@solaralliance.org Sarah@sunlightandpower.com sarahtuntland@vahoo.com sberlin@mccarthylaw.com sbeserra@sbcglobal.net

scott.son@newresourcebank.com scott.tomashefsky@ncpa.com scottanders@sandiego.edu

sdhilton@stoel.com sebesq@comcast.net sendo@ci.pasadena.ca.us sephra.ninow@energycenter.org

sewayland@comcast.net

sfrantz@smud.org

Sgupta@energy.state.ca.us shallin@recsolar.com slins@ci.glendale.ca.us sls@a-klaw.com

smiller@energy.state.ca.us spatrick@sempra.com ssmyers@att.net

stephaniec@greenlining.org stephen.morrison@sfgov.org

stephen@seiinc.org

steve@energyinnovations.com susan.munves@smgov.net svolker@volkerlaw.com

sww9@pge.com tam@cpuc.ca.gov

tbardacke@globalgreen.org tcarlson@reliant.com tdillard@sppc.com tdp@cpuc.ca.gov tdr-hmw@sbcglobal.net ted@energy-solution.com

Tenorio@sunset.net TFlanigan@EcoMotion.us thaliag@greenlining.org

THAMILTON5@CHARTER.NET

theresa.mueller@sfgov.org tim@drakerlabs.com

tmacbride@goodinmacbride.com tomb@crossborderenergy.com tomhoff@clean-power.com traceydrabant@bves.com troberts@sempra.com

usdepic@gmail.com

vincent@vincentbattaglia.com vprabhakaran@goodinmacbride.com

vschwent@sbcglobal.net www@eslawfirm.com yonah@powerbreathing.com

zca@cpuc.ca.gov

zfranklin@gridalternatives.org

zingher@ieee.org

TERENCE PARKER UNITED SOLAR OVONIC, LLC 3800 LAPEER ROAD AUBURN HILLS MI 48326

HARVEY M. EDER PUBLIC SOLAR POWER COALITION 1218 12TH STREET, NO. 25 SANTA MONICA CA 90401

DAVID J. COYLE ANZA ELECTRIC COOPERATIVE, INC 58470 HIGHWAY 371 ANZA CA 92539-1909

CALIFORNIA ENVIRONMENTAL PROTECTION PO BOX 2815 SACRAMENTO CA 95812-2815

#### SERVICE LIST R.04-03-017

aabed@navigantconsulting.com

abb@eslawfirm.com act6@pge.com aes@cpuc.ca.gov amber.dean@sce.com

andrew.mcallister@energycenter.org

andy@ongrid.net

apeterso@energy.state.ca.us arno@recurrentenergy.com

atrowbridge@daycartermurphy.com

aube-m@na.marubeni.com

barbeeq@mac.com

Bblackbu@energy.state.ca.us bcragg@goodinmacbride.com

bernadette@environmentcalifornia.org

blaising@braunlegal.com brbarkovich@earthlink.net

breene@bkp.com

brian.biering@resources.ca.gov

Case.Admin@sce.com cem@newsdata.com

centralfiles@semprautilities.com

ceyap@earthlink.net

cfaber@semprautilities.com clower@earthlink.net

cmanson@semprautilities.com cmanzuk@semprautilities.com coconnor@redwoodenergy.org corie.cheeseman@miis.edu cpuccases@pge.com

cpucrulings@navigantconsulting.com

cte@eslawfirm.com Dan.adler@calcef.org

Dan.Thompson@SPGsolar.com darryl.conklin@renewable.com dhlommen@apollopower.com

dhouck@ndnlaw.com diane\_fellman@fpl.com djohnson@energy.state.ca.us

dks@cpuc.ca.gov

dmoard@powerhouseenergy.net

dot@cpuc.ca.gov dsh@cpuc.ca.gov dwang@nrdc.org dwood8@cox.net dwood8@cox.net

editorial@californiaenergycircuit.net

edward.randolph@asm.ca.gov

e-recipient@caiso.com filings@a-klaw.com fortlieb@sandiego.gov FredMorse@MorseAssociatesInc.com

freedman@turn.org gbeck@etfinancial.com George.Simons@itron.com GLBarbose@LBL.gov golden@goldenenergy.com

gss@nfcrc.uci.edu

harveyederpspc.org@hotmail.com

hcf@cpuc.ca.gov hfhunt@optonline.net hgross@globalgreen.org HYao@SempraUtilities.com

info@calseia.org

irene.stillings@energycenter.org

james.lehrer@sce.com janmcfar@sonic.net jaturnbu@ix.netcom.com

jchs@pge.com

jeanne.clinton@earthlink.net jennifer.porter@energycenter.org

jf2@cpuc.ca.gov jhendry@sfwater.org jimross@r-c-s-inc.com jkcliburn@gmail.com joe@silverwoodenergy.com john.lembo@starwoodhotels.com johnrredding@earthlink.net josh@hydrogenllc.com jpross@sungevity.com jsanders@caiso.com jsugar@energy.state.ca.us jwiedman@goodinmacbride.com

jwwd@pge.com karambelas@fce.com karen@klindh.com karly@solardevelop.com kim@cpuc.ca.gov kmccrea@sablaw.com

kroberts@cityofsacramento.org ksmith@powerlight.com Kurt.Scheuermann@itron.com

LATc@pge.com

Idecarlo@energy.state.ca.us leewallach@coejlsc.com lglover@solidsolar.com liddell@energyattorney.com lisa\_weinzimer@platts.com lmerry1@yahoo.com lmh@eslawfirm.com

lnelson@westernrenewables.com

LowryD@sharpsec.com

lp1@cpuc.ca.gov

lpark@navigantconsulting.com

markgsp@sbcglobal.net mclaughlin@braunlegal.com mday@goodinmacbride.com mdjoseph@adamsbroadwell.com meganmmyers@yahoo.com mharrison@firstsolar.com mhyams@sfwater.org Michael.Brown@utcpower.com michaelkyes@sbcglobal.net mike.montoya@sce.com mike@borregosolar.com mkay@aqmd.gov mlrock@shocking.com mnce@pge.com mrawson@smud.org mrl@cpuc.ca.gov mrw@mrwassoc.com mtooley@miscowater.com nellie.tong@us.kema.com nes@a-klaw.com npedersen@hanmor.com obrienc@sharpsec.com pairedhelix@cox.net pforkin@tejassec.com psd@cpuc.ca.gov pthompson@summitblue.com pw1@cpuc.ca.gov rachel@ceert.org rcolicchia@harris-assoc.com rhwiser@lbl.gov rishii@aesc-inc.com rjl9@pge.com rliebert@cfbf.com rmacdona@energy.state.ca.us rob@sunlightelectric.com Robert.F.LeMoine@sce.com robert margolis@nrel.gov scott.tomashefsky@ncpa.com scott@debenhamenergy.com scottanders@sandiego.edu shallenbgr@aol.com skilgrow@manuelbros.com skronland@altshulerberzon.com smiller@energy.state.ca.us solar@oxypower.com spatrick@sempra.com ssmyers@att.net steve@connectenergy.com steve@energyinnovations.com stevegill@gillsonions.com steveng@destrategies.com susan.freedman@sdenergy.org susank@bonair.stanford.edu swason@carollo.com tam@cpuc.ca.gov

tdp@cpuc.ca.gov

thamilton@cheers.org
thunt@cecmail.org
tjt@cpuc.ca.gov
tom.brown@csun.edu
tomb@crossborderenergy.com
tony.foster@itron.com
ttutt@energy.state.ca.us
twombly@kw-engineering.com
vjb@cpuc.ca.gov
vwood@smud.org
wbooth@booth-law.com
wmb@cpuc.ca.gov
www@eslawfirm.com
zca@cpuc.ca.gov

ROBERT PANORA TECOGEN, INC. 45 FIRST AVENUE WALTHAM MA 2451

PETER T. PARRISH CALIFORNIA SOLAR ENGINEERING, INC. 820 CYNTHIA AVE. LOS ANGELES CA 90065

MARK SHIRILAU ALOHA SYSTEMS, INC. 14801 COMET STREET IRVINE CA 92604-2464